

## AEROSOL PAINT SPRAYING WITH LATEX



**Revision Date:** 08/02

**Usage:** Tri-Service applications

**Compliance Impact:** High

**Alternative for:** *Material Substitution:*  
Petroleum-based aerosol spray paints containing Toxics Release Inventory listed chemicals

**Applicable EPCRA Targeted Constituents:**  
Toluene, Xylene, Trimethylbenzene, Ethylbenzene, Acetone, N-Butyl Alcohol, Lead, Chromium

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**Overview:** Spray paints constitute approximately 14% of the Army Research Laboratory's (ARL's) hazardous materials inventory at the Aberdeen Proving Ground Site. Most of these paints are So-Sure Enamel, a petroleum-based product. Each of the petroleum-based aerosol spray paints in ARL's inventory contains Toxics Release Inventory chemicals, and each of these paints also contains more chemicals than the acceptable water-based alternative.

The proposed alternatives to the Eco-Sure and So-Sure paints widely used at ARL are Krylon's latex Home Décor and Kids Tuff spray paints. The ARL does not necessarily endorse Krylon spray paints, but there are no other known aerosols that meet the environmental and performance requirements of this paint. Should another spray paint exist or be developed that meets or exceeds the criteria of these Krylon latex spray paints, they may be listed as examples of paint meeting the preferred criteria. These Krylon paints contain the least number of chemicals, come in a variety of colors, and perform to the satisfaction of ARL's largest aerosol spray paint users. The Krylon latex paint even out-performs obliterating compounds in less coats.

Listed below are the chemical ingredients for each of the major brands of aerosol paints in the ARL inventory for different popular colors. By replacing these paints with Home Décor or Kids Tuff, the inventory can be significantly improved through the elimination of TRI and extraneous chemicals.

*Eco-Sure, 10 chemicals total, including 2 TRI chemicals*

xylene, propane, dimethyl ether, methyl hexanone, aromatic 160, aromatic 150, pentanone, methyl pentanone, trimethylbenzene, butanol

*So-Sure Obliterating Compound, 8 chemicals, including 2 TRI chemicals*

Acetone, propane, toluene, naphtha, butane, methyl propane, Stoddard solvent, xylene

*So-Sure Enamel, 13 chemicals, 3 TRI listed chemicals*

Acetone, propane, toluene, mineral spirits, butane, methyl propane, methoxy methyl ethyl acetate, xylene, methyl hexanone, copper phthalocyanine, ethylbenzene, naphtha, butanone

*Krylon Home Décor, 5 chemicals, NO TRI chemicals*

Propanol, butoxyethanol, dimethyl ether, amorphous precipitated silica, titanium dioxide

Recommendations:

- Dispose of old, unusable paints;
- Use usable paint until depleted;
- When current stocks are depleted, order Krylon latex paint only, unless another type of paint is justified or required.

**Compliance Benefit:**

Replacing petroleum-based aerosol spray paints with latex results in the following compliance benefits:

- Elimination of TRI-listed chemicals found in traditional petroleum-based spray paints.
- Reduction of volatile organic compounds (VOCs), hazardous air pollutants and air toxics found in petroleum-based spray paints, associated with the formation of ground-level ozone and smog and known or suspected to harm human health and/or cause cancer.
- Improved worker and community health and safety.
- Reduced hazardous materials inventory and subsequent tracking and reporting requirements.

**Materials Compatibility:**

The recommended Krylon latex Home Décor and Kids Tuff aerosol spray paints can be used on metal and wood surfaces. Scratch-resistant and durable, this paint provides excellent coverage (out-performs traditional obliterating compounds), and easy cleanup, without running or dripping. Due to the reduced number of chemicals used to manufacture this paint, there is virtually no odor associated with its use. However, the product should be used in a ventilated area.

**Safety and Health:**

The aerosol container is pressurized and must be handled with caution, and either punctured prior to recycling or disposed of as hazardous if used in an industrial setting. Smoking near the container or product during use is prohibited.

**Benefits:**

- Allows ARL employees to enjoy the convenience and efficiency of spray painting with less chemicals and no TRI chemicals.
- Improves worker and community health and safety.
- Improves indoor and outdoor air quality.
- Improves results (many customers have boasted this paint is better than petroleum-based spray paints traditionally used).
- Readily available at competitive prices.
- Reduces ARL's and APG's chemical inventory. This paint contains only 5 chemicals, none of which are TRI-listed. All other spray paints used contain at least 8 chemicals, including at least 2 TRI-listed ones.

**Disadvantages:** None known.

**Economic Analysis:**

Purchase prices for the Krylon latex paint will vary according to the size of the order and the vendor chosen. Price per 10 oz can is generally \$2.00.

**Approving Authority:**

No major claimant has disapproved or endorsed this technology for use. This technology should be adopted only if the user has endorsed its performance for his/her particular application(s).

**Points of**

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**Vendors:** This is not meant to be a complete list, as there are other suppliers of this paint.

Krylon  
1800-4Krylon

Hardware & Supply Company  
800-347-9393

Lasting Paint Company  
800-368-2205

**Sources:** *None listed*

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